

REMARKS

Reconsideration of the present application is respectfully requested.

The present invention relates to an automatic clutch control device wherein a clutch is disposed between an output shaft of a vehicle's power source and a transmission's input shaft. A clutch control means is provided which changes the speed of either or both of the connecting and disconnecting operations performed by the clutch, in accordance with a running state of the vehicle. Thus, for example, as explained in the paragraph bridging pages 60-61 of the specification, the speed of the connecting/disconnecting operations can be changed in accordance with the coefficient of friction of the road in order to maintain vehicle stability.

Original claim 1 recited a clutch control means which changes the speed of the connecting operation and/or the speed of the disconnecting operation, in accordance with the vehicle's running state.

Claim 1 was rejected as anticipated by *Muramoto et al.* U.S. Patent No. 6,351,700, it being asserted that *Muramoto et al.* disclose that the clutch control means changes a speed of the connecting operation and a speed of the disconnecting operation, referencing claims 1, 7, and col. 12, lines 45-60 of *Muramoto et al.* Applicants have carefully reviewed the referenced sections of the *Muramoto et al.* patent, but cannot identify any disclosure corresponding to the presently claimed invention. The disclosure at column 12, lines 45-60 of *Muramoto et al.* discusses the rotation speeds of the clutches 9, 10, but does not address the speed of a clutch engaging operation or a clutch disengaging operation. Nowhere in that passage is there a description of the speed at which the connecting and disconnecting operations take place.

To make certain that the claims are being interpreted as intended, original claim 1 has been rewritten as new claim 11, wherein the connecting operation is defined as extending from a beginning of the connecting operation to an end of the connecting operation. Likewise, the disconnecting operation is defined as extending from a beginning of the disconnecting operation to an end of the disconnecting operation.

If the rejection based upon *Muramoto et al.* is maintained, it is respectfully requested that the passages therein which are believed to relate to the speed of the clutch connecting operation and/or the clutch disconnecting operation be identified.

The cited portion of the *Kadota* patent, (i.e., column 20, lines 20-33) has been reviewed, but that cited portion does not discuss a clutch connecting speed or a clutch disconnecting speed. Rather, that passage seems to relate only to controlling a drive torque transferred to the vehicle's front wheels when acceleration slippage occurs.

Accordingly, it is submitted that claim 11 and all claims dependent therefrom distinguish patentably over the applied prior art.

Attention is directed to new dependent claim 12 which recites that the clutch is connected "directly" between the output shaft of the vehicle's power source and the input shaft of the transmission. Neither *Muramoto et al.* nor *Kadota* discloses such a direct connect relationship. In *Muramoto et al.* the clutch 9 is directly connected to a reduction gear 3, not to a vehicle's power source. In *Kadota*, the clutch 12 is directly connected to a reduction gear 11. Accordingly, it is submitted that claim 11 further distinguishes patentably over the cited prior art.

Claims 11 and 2 overcome the indefiniteness noted in section no. 4 of the
Official Action.

In light of the foregoing, it is submitted that the present application is in
condition for allowance.

Respectfully submitted,

BUCHANAN INGERSOLL PC

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By:

A handwritten signature in black ink, appearing to read 'Alan E. Kopecki', is written over a horizontal line.

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